

Office Action Summary

Application No.

10/803,675

Applicant(s)

CHAU ET AL.

Examiner

Garrett Smith

Art Unit

2168

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-9 and 21-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-9 and 21-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Individual Patent Application
- 6) ☒ Other: PTO-413B

DETAILED ACTION

1. This Office Action is regarding Applicant's response filed 24 October 2008 to a prior Office Action. Claims 7 – 9 and 21 – 27 are pending. Claims 7, 8, 21 – 23 and 25 are amended.
2. This Office Action is the **Fourth Action, Non-Final Rejection**.

Continued Examination under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed 24 October 2008 in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 24 October 2008 has been entered.

Interview

4. The Examiner contacted Wayne Bailey (Reg No. 34,289) to propose a number of amendments to move this case into Allowance. However, authorization from the client could not be gained. Details of the proposed amendments are shown in the attached Interview Summary form.

Response to Arguments

Claim Objections

5. The Examiner notes the corrections to claims 21 and 25. Therefore, the objection to claims 21 and 25 are withdrawn.

35 USC § 103(a)

6. Applicant's arguments (page 8) and amendments, filed 24 October 2008, regarding the rejection under 35 USC § 103(a) of claims 7 – 9 and 21 – 27 have been fully considered but they are not persuasive. Applicant argues that Brisson does not teach the use of the pattern mappings. The Examiner respectfully submits that these arguments were dealt with in the Office Action mailed 24 July 2008. For these reasons, the rejection under 35 USC § 103 of claims 7 – 9 and 21 – 27 is maintained.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims **7 – 9 and 21 – 27** rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

9. In regard to claims **7 – 9 and 21 – 27**, these claims do not appear to be linked to a statutory device or machine. In the Specification, page 12 (top paragraph), the method is "preferably" performed by a software tool. Therefore a question exists as to whether these methods are linked to a particular machine. Therefore, to overcome this rejection, the Examiner suggests that "by a software tool executed by a computer" be inserted into the first generating step of claims 7, 21 and 23.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims **7, 8 and 23 – 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Brisson (US Patent 5,678,052; patented 14 October 1997) in view of Lämmel et al ("Semi-automatic Grammar Recovery; available July 2001) and further in view of Collier et al (US Patent 5,815,152).

13. In regard to **claim 7**, Brisson teaches methods and systems for converting a Backus-Naur Form (BNF) grammar (structural text-based) into a compressed rail-road (RR) diagram (see Abstract, as well as Figure 5 for the example of a BNF and Figure

6a, 6b, 6c for the RR diagram of that BNF). Brisson discloses using pattern mappings to create the RR diagram (see figure 3).

While Brisson does not directly disclose creating a BNF from a RR diagram, Lämmel et al discusses in section 3.1 and 3.2 extraction of whole syntax (i.e. railroad) diagrams from IBM's VS COBOL II manual and the parsing of the diagrams into BNF code. It would have been obvious to a person of ordinary skill at the time of invention to use a the parser of Lämmel et al with the system of Brisson because it provides for a user to check and verify the validity of a provide BNF or RR diagram. Further, it allows a user to quickly convert a RR diagram into a machine readable form for processing by a computer without having to manually convert it (section 3.1 of Lämmel et al).

Brisson does not explicitly teach that the representations can be business processes. Collier et al does teach that graphical representation of business processes can be created through an interface (see figure 5). It would have been obvious to a person of ordinary skill at the time of invention to use the conversion methods and systems of Brisson and Lämmel et al with the graphical business process representations of Collier et al because it would resulted in the predictable result of converting text-based business processes into graphical representations of the business processes and furthermore would allow a user to have a multi-format business process that could be used elsewhere.

14. In regard to **claim 8**, Brisson, as mentioned above, teaches pattern mapping for converting between a BNF and a RR diagram (col 5, lines 44 – 60). Collier et al further teaches a system that allows a user to construct a business process with nodes that

include conditionals, send/receive/response actions, and iterations (see figures 5, 8 and 11).

While Brisson does not directly disclose creating a BNF from a RR diagram, Lämmel et al discusses in section 3.1 and 3.2 extraction of whole syntax (i.e. railroad) diagrams from IBM's VS COBOL II manual and the parsing of the diagrams into BNF code. It would have been obvious to a person of ordinary skill at the time of invention to use a the parser of Lämmel et al with the system of Brisson because it provides for a user to check and verify the validity of a provide BNF or RR diagram. Further, it allows a user to quickly convert a RR diagram into a machine readable form for processing by a computer without having to manually convert it (section 3.1 of Lämmel et al).

Brisson does not explicitly teach that the representations can be business processes. Collier et al does teach that graphical representation of business processes can be created through an interface (see figure 5). It would have been obvious to a person of ordinary skill at the time of invention to use the conversion methods and systems of Brisson and Lämmel et al with the graphical business process representations of Collier et al because it would resulted in the predictable result of converting text-based business processes into graphical representations of the business processes and furthermore would allow a user to have a multi-format business process that could be used elsewhere.

15. In regard to **claim 23**, Brisson teaches methods and systems for converting a Backus-Naur Form (BNF) grammar (structural text-based) into a compressed rail-road (RR) diagram (see Abstract, as well as Figure 5 for the example of a BNF and Figure

6a, 6b, 6c for the RR diagram of that BNF). Brisson discloses using pattern mappings to create the RR diagram (see figure 3).

While Brisson does not directly disclose creating a BNF from a RR diagram, Lämmel et al discusses in section 3.1 and 3.2 extraction of whole syntax (i.e. railroad) diagrams from IBM's VS COBOL II manual and the parsing of the diagrams into BNF code. It would have been obvious to a person of ordinary skill at the time of invention to use a the parser of Lämmel et al with the system of Brisson because it provides for a user to check and verify the validity of a provide BNF or RR diagram. Further, it allows a user to quickly convert a RR diagram into a machine readable form for processing by a computer without having to manually convert it (section 3.1 of Lämmel et al).

Brisson does not explicitly teach that the representations can be business processes. Collier et al does teach that graphical representation of business processes can be created through an interface (see figure 5). It would have been obvious to a person of ordinary skill at the time of invention to use the conversion methods and systems of Brisson and Lämmel et al with the graphical business process representations of Collier et al because it would resulted in the predictable result of converting text-based business processes into graphical representations of the business processes and furthermore would allow a user to have a multi-format business process that could be used elsewhere.

16. In regard to **claim 24**, Collier et al further teaches a system that allows a user to construct a business process with nodes that include conditionals, send/receive/response actions, and iterations (see figures 5, 8 and 11).

While Brisson does not directly disclose creating a BNF from a RR diagram, Lämmel et al discusses in section 3.1 and 3.2 extraction of whole syntax (i.e. railroad) diagrams from IBM's VS COBOL II manual and the parsing of the diagrams into BNF code. It would have been obvious to a person of ordinary skill at the time of invention to use a the parser of Lämmel et al with the system of Brisson because it provides for a user to check and verify the validity of a provide BNF or RR diagram. Further, it allows a user to quickly convert a RR diagram into a machine readable form for processing by a computer without having to manually convert it (section 3.1 of Lämmel et al).

Brisson does not explicitly teach that the representations can be business processes. Collier et al does teach that graphical representation of business processes can be created through an interface (see figure 5). It would have been obvious to a person of ordinary skill at the time of invention to use the conversion methods and systems of Brisson and Lämmel et al with the graphical business process representations of Collier et al because it would resulted in the predictable result of converting text-based business processes into graphical representations of the business processes and furthermore would allow a user to have a multi-format business process that could be used elsewhere.

17. In regard to **claim 25**, Brisson, as mentioned above, teaches pattern mapping for converting between a BNF and a RR diagram (col 5, lines 44 – 60). Collier et al further teaches a system that allows a user to construct a business process with nodes that include conditionals, send/receive/response actions, and iterations (see figures 5, 8 and 11).

While Brisson does not directly disclose creating a BNF from a RR diagram, Lämmel et al discusses in section 3.1 and 3.2 extraction of whole syntax (i.e. railroad) diagrams from IBM's VS COBOL II manual and the parsing of the diagrams into BNF code. It would have been obvious to a person of ordinary skill at the time of invention to use a the parser of Lämmel et al with the system of Brisson because it provides for a user to check and verify the validity of a provide BNF or RR diagram. Further, it allows a user to quickly convert a RR diagram into a machine readable form for processing by a computer without having to manually convert it (section 3.1 of Lämmel et al).

Brisson does not explicitly teach that the representations can be business processes. Collier et al does teach that graphical representation of business processes can be created through an interface (see figure 5). It would have been obvious to a person of ordinary skill at the time of invention to use the conversion methods and systems of Brisson and Lämmel et al with the graphical business process representations of Collier et al because it would resulted in the predictable result of converting text-based business processes into graphical representations of the business processes and furthermore would allow a user to have a multi-format business process that could be used elsewhere.

18. Claims **21 and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Brisson (US Patent 5,678,052; patented 14 October 1997) in view of Lämmel et al ("Semi-automatic Grammar Recovery; available July 2001), further in view of Collier et al (US Patent 5,815,152), and further in view of Official Notice.

19. In regard to **claim 21**, Brisson teaches methods and systems for converting a Backus-Naur Form (BNF) grammar (structural text-based) into a compressed rail-road (RR) diagram (see Abstract, as well as Figure 5 for the example of a BNF and Figure 6a, 6b, 6c for the RR diagram of that BNF). Brisson discloses using pattern mappings to create the RR diagram (see figure 3).

While Brisson does not directly disclose creating a BNF from a RR diagram, Lämmel et al discusses in section 3.1 and 3.2 extraction of whole syntax (i.e. railroad) diagrams from IBM's VS COBOL II manual and the parsing of the diagrams into BNF code. It would have been obvious to a person of ordinary skill at the time of invention to use a the parser of Lämmel et al with the system of Brisson because it provides for a user to check and verify the validity of a provide BNF or RR diagram. Further, it allows a user to quickly convert a RR diagram into a machine readable form for processing by a computer without having to manually convert it (section 3.1 of Lämmel et al).

Brisson does not explicitly teach that the representations can be business processes. Collier et al does teach that graphical representation of business processes can be created through an interface (see figure 5). It would have been obvious to a person of ordinary skill at the time of invention to use the conversion methods and systems of Brisson and Lämmel et al with the graphical business process representations of Collier et al because it would resulted in the predictable result of converting text-based business processes into graphical representations of the business processes and furthermore would allow a user to have a multi-format business process that could be used elsewhere.

Brisson, Lämmel et al and Collier et al do not explicitly describe catch statements or fault handling. However, "throw-catch" statements and their uses are very well known in the art. Therefore, the Examiner takes Official Notice that "catch" statements (and related fault handling) is well known by a person of ordinary skill in art. It would have been obvious to a person of ordinary skill in the art at the time of invention to use the combined system of Brisson, Lämmel et al and Collier et al with that of parsing a describing catch statements because catch statements (and the related throw statements) can be very complex and thus a way to parse these complex statements for easy understanding and debugging is beneficial.

20. In regard to **claim 22**, Brisson, as mentioned above, teaches pattern mapping for converting between a BNF and a RR diagram (col 5, lines 44 – 60). Collier et al further teaches a system that allows a user to construct a business process with nodes that include conditionals, send/receive/response actions, and iterations (see figures 5, 8 and 11).

While Brisson does not directly disclose creating a BNF from a RR diagram, Lämmel et al discusses in section 3.1 and 3.2 extraction of whole syntax (i.e. railroad) diagrams from IBM's VS COBOL II manual and the parsing of the diagrams into BNF code. It would have been obvious to a person of ordinary skill at the time of invention to use a the parser of Lämmel et al with the system of Brisson because it provides for a user to check and verify the validity of a provide BNF or RR diagram. Further, it allows a user to quickly convert a RR diagram into a machine readable form for processing by a computer without having to manually convert it (section 3.1 of Lämmel et al).

Brisson does not explicitly teach that the representations can be business processes. Collier et al does teach that graphical representation of business processes can be created through an interface (see figure 5). It would have been obvious to a person of ordinary skill at the time of invention to use the conversion methods and systems of Brisson and Lämmel et al with the graphical business process representations of Collier et al because it would resulted in the predictable result of converting text-based business processes into graphical representations of the business processes and furthermore would allow a user to have a multi-format business process that could be used elsewhere.

21. **Claims 9, 26 and 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Brisson (US Patent 5,678,052; patented 14 October 1997) in view of Lämmel et al ("Semi-automatic Grammar Recovery; available July 2001) and Collier et al (US Patent 5,815,152) as applied above and in further view of Nemer (US PGPUB 2003/0110446, published 12 June 2003).

22. In regard to **claim 9**, Nemer teaches an object class and method for converting XML (which XPath is part of) to Java code and Java into XML code (see figure 3 and 4). It would have been obvious to a person of ordinary skill in the at the time of invention to use the conversion system of Nemer with the system of Brisson and Collier et al because it would have given the predictable result of converting a structured text based language (XML) into a code that can be used for graphical representations (Java).

23. In regard to **claim 26**, Nemer teaches an object class and method for converting XML (which XPath is part of) to Java code and Java into XML code (see figure 3 and 4). It would have been obvious to a person of ordinary skill in the art at the time of invention to use the conversion system of Nemer with the system of Brisson and Collier et al because it would have given the predictable result of converting a structured text based language (XML) into a code that can be used for graphical representations (Java).
24. In regard to **claim 27**, Nemer teaches an object class and method for converting XML (which XPath is part of) to Java code and Java into XML code (see figure 3 and 4). It would have been obvious to a person of ordinary skill in the art at the time of invention to use the conversion system of Nemer with the system of Brisson and Collier et al because it would have given the predictable result of converting a structured text based language (XML) into a code that can be used for graphical representations (Java).

Conclusion

25. The Examiner requests, in response to this Office action, that support be shown for language added to any original claims on amendment and any new claims. That is, indicate support for newly added claim language by specifically pointing to page(s) and line no(s) in the specification and/or drawing figure(s). This will assist the Examiner in prosecuting the application.

26. When responding to this Office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present, in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections See 37 CFR 1.111(c).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Garrett Smith whose telephone number is (571)270-1764. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim T. Vo can be reached on (571) 272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/GS/
Garrett Smith
Patent Examiner
Art Unit 2168

/Tim T. Vo/
Supervisory Patent Examiner, Art Unit 2168